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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/622,668 | 07/21/2003 | Yasuhiro Yoshioka | FSF-031391 | 3824 |

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| EXAMINER | |
|---|---|
| CHEA, THORL | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1752 | |

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/622,668 | YOSHIOKA ET AL. | |
| | Examiner | Art Unit | |
| | Thorl Chea | 1752 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20060309*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 9, 2006 has been entered.

2. Claims 1-17 are pending in this instant application.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

*4.* Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification disclosure fails to clearly describe the "dye" forms by the reducing agent present in the claimed invention. The specification disclosure discloses the dye of formula R1 and R2 which is a bisphenols reducing agent for silver ions, but does not disclose the use of the bisphenols known as reducing agent for silver ion in the formation of a "dye". Moreover, while the specification disclosure use the term "dye", but fails to describe as what type of dye is.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

*6.* Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claiming the "dye" in claim 1, 17 is indefinite since the specification fails to clearly define the scope of the dye that forms with the reducing agent present in the claimed invention.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cerquone et al (US Patent No. 4,021,240). See the material in the abstract, and column 25-30 wherein the material contains photographic silver halide, silver salt oxidizing agent, binder, reducing agent and a coupler; see also column 6, lines 30-68 which discloses the use of the reducing agent that does not adversely affect the desire color image such as phenolic leuco dye reducing agent. It is believed that the reducing agent react with silver salt oxidizing agent to produce a desired dye in the imagewise exposed area of

the photothermographic element, and the latent image silver produce upon imagewise exposure catalyzes the reaction between the reducing agent and the silver salt oxidizing agent. Accordingly, the worker of ordinary skill in the art would have envisaged that the use of a reducing agent for silver salt oxidizing agent is necessary to catalyzes the reaction the reaction between the reducing agent and the silver salt oxidizing agent is necessary, and would have used thereof in the photothermographic material, and therefore, anticipate the material of the claimed invention. Alternatively, the worker of ordinary skill in the art at the time the invention was made to the color reducing agent taught therein with an expectation of achieving a similar material. The color developing agent react with color coupler, but not with silver salt reducing agent. Therefore, it has activity higher than that of reducing agent for silver salt oxidizing agent with respect to color coupler.

10. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 10096310 (EP'310).

The EP'310 discloses a photothermographic material substantially as claimed. See the phenol compound on page 3, compound (I) and the description of –L- and R1 to R8 on page 5 such as L is $-CHR^9-$, R9 is hydrogen or alkyl; R1, R8 represent secondary alkyl group or a tertiary alkyl group; R2, R4, R5, R7 represent hydrogen, halogen, or an alkyl group, more preferably hydrogen; R1, R3, R6, R8 represent an alkyl group, more preferably, a primary group having 1-20 carbon atoms, a secondary alkyl group having 3-20 carbon atoms, or tertiary group having 4-20 carbon atom, and the substituent thereof includes alkoxy group , aryloxy group, hydroxyl group, acyloxy group, amino group, heterocyclic group. See also the compound on page 9, I-22 that contains $-CH_2OCH_3$; compound (I-24) on page 10; the compound (I-12) on page 8. see the

other additive such as compound having phosphoryl group on pages 20-34; the halogenated compound on pages 60, [0242], [0243]; the amount of reducing agent on pages 11, [0039], [0040]; the amount of silver salt on page 35, [0074]; the toning agent and the ultrahigh contrast developer on page 41; the hydrazine derivative on page 49, [0167], [0168]; and time and temperature processing on page 53, [0210]. The EP'310 differs from that of the present claimed invention is the combination of agents of two reducing agents comprising a reducing agent which doe not form a dye during thermal development and the reducing agent which form a dye during thermal development, and the reducing agent which forms a dye has higher activity than that of the reducing agent which does not form a dye, but the reducing agents of the claimed invention are within the scope of the compound of formula (I) on page 3 of EP'310 on page 3, described above. The properties with respect to the formation with a dye are considered as inherent to the reducing agent of the EP'310. The reducing agent taught in EP'310 provide a photothermographic material with sufficient image density and image storage stability could be remarkably improved without substantially degrading the reducing property. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use one or more compound within the scope of formula (I) of EP'310 with an expectation of achieving a highly useful material with sufficient image density and image storage stability could be remarkably improved without substantially degrading the reducing property, and thereby provide a material as claimed.

***Double Patenting***

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-15 of copending Application No. 10/635,540. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claimed invention are directed to the use of the combination of reducing agent having different activity using the reducing agent of formula R1 and R2.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Response to Arguments***

13. Applicant's arguments filed March 9, 2006 have been fully considered but they are not persuasive because of the rejection set forth above.

With respect to Cerquone , the applicants argue that Cerquone does not teach the combination of reducing agent, one of which does not form a dye and the other forms a dye and has developing activity higher than that of the former. Therefore, it is respectfully request that this rejection is withdrawn.

It is that the argument is not persuasive. It appears that the applicants imply that the reducing agent present in the claims are reducing agent for silver ion. However, the invention as claimed is not so stated. The claims are related to the reducing agents for a thermal development which are read on the reducing agent and developer taught in Cerquone. Cerquone discloses the use of reducing agent for silver ions and this reducing agent is not form a dye during thermal development and the reducing agent is a developer used in the formation of a color image. This developer is form a dye during thermal development, and therefore, the reactivity in forming a dye is higher than that of the reducing agent for silver ion which is not formed a dye.

With respect to EP'310, the applicants argue that EP'310 does not suggest any combination of R1 and R2. Moreover, with regard to the invention claimed in claims 3 and 4 of the present application, even if the compound taught in EP'310 which is within the scope of the compound represented by formula (R1) of the present invention, and the compound taught in EP'310 which is within the scope of formula R2 of the present invention are intentionally combined, it is still deemed that the remarkable effect of the improvement of the gradation of the silver images obtained by the specific feature of the development activities and the amount could not conceived by those skilled in the art based on the disclosure of EP'310. Therefore, the feature of claims 3, 4 that the amount of reducing agent which form a dye (see lines 8 to 10, page 18 of the present specification) and that the remarkable effect of the improvement in gradation of the silver image obtained by the specific features for the developing activities and the amount is beyond expectations is based the disclosure of EP'310.

It is the Examiner's position that EP'310 discloses the compound within the scope of reducing agent R1 and R2 claimed in the claimed invention, and these compounds act as reducing agent

for silver ion. The compound used in the reducing system as claimed has been known as reducing agent for silver ions such as taught in EP'310. on page 3, lines 1-4, EP'310 discloses the use of one or more phenol compounds as reducing agent and the preferred phenol compound is represented by formula (I) in [0013] and amongst such compounds, those compound of the formula (I) are preferred because of their higher heat developability [page 5, 0027]. It would have expected to the worker of ordinary skill in the art at the time the invention was made to use one or more compound within the scope of "o-polyphenol compound" taught in EP'310 within an reasonable expectation of providing the material of EP'310 with silver image. "It is prima facie obvious to combine two compositions each of which taught by the prior art to be useful for the same purpose in order to form a third composition to be used for the same purpose. In re Kerhoven, 205 USPQ 1069, 1072 (CCPA 1980)." Use of this developer with another disclosed developers which perform the same function would have been obvious to one of ordinary skill in the art. In re Crockett, 126 USPQ 186. "A prima facie case of obviousness may be made when chemical compounds have very close structural similarity and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991)." In this present invention the developers as claimed have been known in EP'310, and it would have been found prima facie obvious to the worker of ordinary skill in the art to use one or more compound as reducing agents with an expectation of producing silver image material.

The argument with respect to claims 2-3 is not persuasive. The invention in claim 1 is not limited to the compound of formula R1 and R2, but encompasses the scope of the reducing agent and developer taught in Cerquone. Supposedly, the limitation in claims 2-3 is incorporated in claim 1, the invention is still prima facie obvious over EP'310 since the compound of formula R1 and R2 is taught in EP'310, and the applicants fails to shows the criticality of the combination of the reducing agent or the amount thereof presented in the argument. The argument with the superior results is not persuasive since it is based on the Counsel's assertion. Counsel's arguments cannot take the place of evidence. In re Greenfield, 571 F. 2d 1185, 197 USPQ 227 (CCPA 1978). The specification such as on page 135 discloses that "From Table 1, it can be seen that samples 008 to 020 which were combinations of the invention were excellent photothermographic materials which were excellent in tone at standard development and, at the same time, were small in variation of tone under the development conditions". The excellent results is not sufficient to overcome the prima facie of obviousness rejection. The difference between the results must be significant that would have been found unexpected by the worker of ordinary skill in the art. The difference in results cannot be determined using the symbole shown in Table 1. Moreover, the results even if found unexpected, it would not overcome the rejection under 35 USC 102(b). "(E)vidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C 102 rejections and thus cannot overcome a rejection so based. In re Wiggins, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973).

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea-ftr
2006-05-22

Thorl Chea
Primary Examiner
Art Unit 1752